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DAIRY INSPECTION

PUBLIC HEALTH AND WELFARE TECHNICAL BULLETIN

PH & W GHQ SCAP APO 500

22 November 1946

The following dairy inspection regulations are published for the information and guidance of Public Health Officers for the purpose of establishing uniform milk control practices in Japan. The Japanese Ministry of Health and Welfare has adopted this method of inspection and directed its use in all prefectures.

SECTION 1. FARM INSPECTION

Dairy farm inspection methods of procedure shall be in accordance with the following form known as "The Dairy Score Card".

a. "Face of the Dairy Score Card".

No. of inspection

Name and address

No. of dairy cattle

Liters of whole milk produced

Milk distributors name and address.....

Date inspection was made.....

Inspectors name

b. REVERSE SIDE OF THE DAIRY SCORE CARD.

<u>ITEMS</u>	<u>TOTAL POINTS</u>	<u>SCORED POINTS</u>
<u>1. Sanitation of cows</u>	20	()
(a) Health conditions	(10)	()
(b) Cleanliness	(7)	()
(c) Feed and water supply	(3)	()
<u>2. Dairy Barn</u>	20	()
(a) Location	(2)	()
(b) Ceilings and walls	(2)	()
(c) Floors	(2)	()
(d) Lighting	(2)	()
(e) Ventilation	(2)	()
(f) Drainage	(2)	()
(g) Bedding	(2)	()
(h) Manure disposal	(2)	()
(i) Cow yards	(2)	()
(j) Surroundings	(2)	()
<u>3. Milking and handling milk</u>	35	()
(a) Milk house	(10)	()
(b) Cooling system	(15)	()
(c) Milkers	(10)	()
<u>4. Utensils</u>	25	()
(a) Milk Pails	(5)	()
(b) Filters	(5)	()
(c) Milk cans	(5)	()
(d) Cleaning methods	(5)	()
(e) Sterlizing methods	(5)	()
Total	100	()

c. INSTRUCTIONS

The scoring at any inspection will be made in conformity with the following Scoring Standards.

1 Health Conditions

- (a) Nutritional condition shall be good to excellent for past six (6) months.
- (b) The herd shall be free of reactors to the tuberculin test for the last twelve (12) months.
- (c) Animals suffering from any of the diseases described under Article 4, of the milk control regulations shall be removed from the herd at once.
- (d) Animals shall react negatively to the abortion test annually.
- (e) There shall be no physiological defects allowed in the udders of the cows.
- (f) The milk shall be entirely normal.

2 Cleanliness

- (a) Entire body of cows shall be well groomed.
- (b) The udders and teats shall be cleaned and rinsed with clean warm water and dried with clean cloths at time of milking.

3 Feed and Water Supply

- (a) Feeding materials shall be clean and placed in clean receptacles at time of feeding.
- (b) Feeds shall be nutritionally sufficient to sustain the cows in a healthy condition.

(c) Water supply shall be ample, convenient and free of contamination

4 Location

(a) The barn shall be dry and in a well drained area.

(b) It shall be free from odors at all times.

(c) There shall be no openings leading into living quarters

5 Ceilings and walls.

(a) Ceilings shall be of smooth lumber and built firm and tight.

(b) Walls shall be smooth and water tight one meter above floors.

(c) Cobwebs and spiderwebs shall be removed.

6 Floors

(a) Floor shall be of concrete or other impervious material graded for drainage and on a higher plane than the surrounding ground.

(b) Floor shall be suitably constructed so as to allow easy cleaning.

(c) Stanchions and stall uprights shall be clean and used for racks or storage of material.

(d) Refuse and animal waste products shall be removed from the cattle shed daily.

7 Lighting

(a) Window area at least $\frac{1}{2}$ S.M. per cow and of glass and frame construction.

(b) Where practical, ceiling windows may be used as this will increase sunlight in the cattle shed.

8 Ventilation

(a) Glass windows shall be constructed so that they may be opened and closed.

(b) Storm windows are desirable for use in inclement weather.

(c) Ceiling ventilators shall be installed to carry off dead air collecting in the upper area of the shed.

(d) Odors and dust must be kept from the cattle sheds.

9 Drainage of Floors

(a) Manure gutters shall be of proper width and depth to facilitate easy cleaning.

(b) Manure shall not be allowed to collect in gutters.

(c) Drains for carrying off surface water must be adequate to prevent seepage into soil at edge of barn.

10 Bedding.

(a) Fresh clean bedding shall be used daily and at no time shall soiled bedding be dried and then re-used.

(b) The change of beddings shall not be done just prior to milking.

11 Manure Disposal

(a) Tanks for manure disposal shall be of impervious material and at least 10 meters distant from cattle shed and equipped with a tight fly proof cover to control fly breeding and emanating odors.

(b) Septic tanks for waste water shall be at least 10 meters distant from cattle sheds and tightly covered.

12 Cow Yards.

- (a) This area shall be of sufficient size as to allow the cattle freedom of movement.
- (b) Area to be well drained, dry and clean, with a water trough accessible to all cows.
- (c) Cattle shall be exercised daily as this is a requirement in the maintenance of good health.

13. Surroundings

- (a) The most practical place where dusty roads, "benjos", neighboring manure piles and fly breeding places can be avoided with a minimum of danger from natural contaminants.

14 Milk House.

- (a) Milk house floors must be constructed of impervious materials and be free from dust.
- (b) Milk house walls and ceilings can be constructed of either concrete, tile or wood and must be air tight and smooth so as to afford easy cleaning.
- (c) Light and ventilation must be adequate with screens over windows to control menace.
- (d) The milk house shall be equipped with a milk room and a utensil room partitioned off, with both being accessible to adequate and clean water supply for sterilization of the utensils.
- (e) A concrete water trough can be installed in the milk house for cooling the milk after it is placed in the milk cans.

15 Cooling System.

(a) Milk shall be cooled to 10 degrees C. or less immediately after milking, and held at that temperature until delivered to the distributor.

(b) The milk cans must have the lids on tightly during the cooling period and at no time shall they be left uncovered while containing milk.

16 Milkers.

(a) Milkers shall not be in conflict with Article 17 of the Milk Control Regulation.

(b) Milkers must have adequate knowledge and technique of milk hygiene.

(c) Milkers shall be benevolent to animals.

(d) Milkers must keep their bodies clean and their fingernails clipped short.

(e) Clean outer garments and caps must be worn at time of milking.

(f) Milk stools shall be kept clean at all times.

(g) Milking methods shall be carried out in a rational and sanitary manner.

(h) Smoking and expectorating shall not be engaged in while milking.

(i) Milkers shall always cleanse their hands after a visit to the "benjo".

17 Milk Pails

(a) Shall not be in conflict with Article 15 of the Milk Control Regulation.

(b) Shall be small mouth receptacles.

(c) Smooth and easily cleaned.

- (c) Smooth and easily cleaned.
- (d) No rough or over-lapping joints.
- (e) Free from rust.
- (f) Shall be used only for milking and when not in use, they shall be inverted on pegs or shelves.

18 Milk Filters.

- (a) Filter cloths shall be clean, unbroken and dry.
- (b) They shall not be used for any other purpose, and shall be re-newed at intervals.

19 Milk Cans.

- (a) Basically, they shall be subject to the same conditions governing milk pails.
- (b) Lids shall be attached to the cans and shall fit tight when in position.
- (c) Shall be free from rust.

20 Cleaning Methods.

(a) Milk utensils must be cleaned with fresh clean water immediately after being emptied. Using a brush and an alkali substance in hot water, they are to be thoroughly scrubbed, and then rinsed with clean water until all of the alkali water has been removed. Then hang up to dry and drain with the cans in an inverted position.

(b) Extreme care shall be exercised during the cleaning process to avoid damage to cans through rough handling.

21 Sterilizing Methods.

a. Milk plants or milk receiving stations shall be equipped with live steam or boiling water facilities for sterilization of the cans.

- (b) If a steam cabinet is used, a temperature of 80 degrees C., for 15 minutes, or 95 degrees C. for 5 minutes is satisfactory.
- (c) Sterilizing facilities, either by sun or artificial heat shall be properly located.
- (d) Prompt drying of the interior of the cans by natural drainage is required. This will also prevent rust formation.

- d. The Dairy Score Cards must be produced two (2) for each dairy farm, and one copy retained officially by the Public Health Section of each Prefecture, for one year.
- e. The copy of the Dairy Score Card furnished the dairyman shall be tacked in a conspicuous place for inspection purposes.
- f. The inspection by the Dairy Score Card method shall be executed at least once a month.
- g. When the scored points are totaled 3 times consecutively and do not exceed half of the total points possible, the authorities may prohibit the sale of milk from that farm until re-instated.
- h. Any dairy farm supplying or delivering milk to a collecting station or processing plant shall operate under the Dairy Score Card system.
- i. A copy of the inspection results of the month shall be sent to the director of Public Health Bureau of the Ministry of Welfare before the 15th of the next month.

SECTION 2. PLANT INSPECTION

Dairy plant inspection methods of procedure shall be in accordance with the following form known as the "Milk Plant Inspection Report".

a. "FACE OF THE MILK PLANT INSPECTION REPORT"

NO. OF INSPECTIONS - - - - -

NAME AND ADDRESS - - - - -

NO. OF HERDS - - - - -

LITERS OF WHOLE MILK PROCESSED - - -

DATE INSPECTION WAS MADE - - - - -

INSPECTORS NAME - - - - -

b. "Reverse Side of MILK PLANT Inspection Report".

1 FLOORS: (4)

- (a) Smooth finish, no pools ()
- (b) Wall joints and floor surfaces impervious material ()
- (c) Trapped drains ()
- (d) Clean & free of material and equipment not in use ()

2 WALL AND CEILINGS (2)

- (a) Smooth, washable, impervious, finish, pipes ()
- (b) Clean and in good repair ()

3 DOORS AND WINDOWS (2)

- (a) Outer openings screened and in good repair ()
- (b) Self closing doors ()

4 LIGHTING AND VENTILATION (3)

- (a) Adequate artificial light evenly distributed ()
- (b) Ample to prevent undue condensation and odors ()
- (c) If steam is used, exhaust is outside ()

5 MISCELLANEOUS PROTECTION FROM CONTAMINATION (12)

- (a) Plants and rooms properly located ()
- (b) Satisfactory surroundings ()
- (c) Processes partitioned ()
- (d) Rooms of adequate size ()
- (e) Raw milk not unloaded into pasteurizers ()
- (f) Dump or receiving vats covered ()
- (g) Flies controlled ()
- (h) Straining of pasteurized milk through non-corrodible material ()
- (i) Pasteurized milk not in contact with unsterilized raw milk equipment ()
- (j) No raw milk by-passing pasteurized milk ()
- (k) No direct opening into stables or living quarters ()
- (l) No drip from mezzanine floor ()

6 TOILET FACILITIES (5)

- (a) Adequate and conveniently located and in good repair ()
- (b) Clean and well ventilated ()
- (c) Vestibule with self closing door ()
- (d) Free of flies ()
- (e) Hand washing signs on walls ()

7 WATER SUPPLY (2)

- (a) Sufficient outlets and adequate for the needs ()
- (b) Safe source ()

8 HAND WASHING FACILITIES (3)

- (a) Convenient to hot water
- (b) Soap
- (c) Sanitary towels ()

9 MILK PIPING (3)

- (a) Sanitary type easily cleaned ()
- (b) Smooth uncorroded surfaces ()
- (c) Sanitary fittings ()

10 CONSTRUCTION & REPAIR OF EQUIPMENT & CONTAINERS (5)

- (a) Easily cleaned, smooth surfaces, non-corrodible ()
- (b) No open seams ()
- (c) Self draining ()
- (d) In good repair ()
- (e) Pressure tight seats on submerged thermal openings ()

11 DISPOSAL OF WASTES (2)

- (a) In public sewer or septic tank ()
- (b) Trash and garbage kept in covered containers ()

12 CLEANING, TREATMENT OF CONTAINERS & APPARATUS (8)

- (a) Containers thoroughly cleaned each day ()
- (b) Apparatus cleaned each day ()
- (c) Containers treated each day to reduce bacterial count ()
- (d) Steam or hot water flow daily in apparatus ()

13 STORAGE OF CONTAINERS AND APPARATUS (2)

- (a) Inverted in crates or on racks in clean places ()

14 HANDLING OF CONTAINERS & APPARATUS (2)

- (a) No handling of surfaces exposed to milk ()
- (b) Paper caps or cups applied mechanically ()

15 STORAGE OF CAPS (3)

- (a) Caps purchased in cartons or tubes ()
- (b) Kept in a clean room ()
- (c) First cap and cup always discarded ()

16a INDICATING AND RECORDING THERMOMETERS (4)

- (a) Indicating thermometers checked monthly for correctness ()
- (b) Recording thermometers checked against
(a) ()

16b MAINTENANCE OF PASTEURIZATION TIME AND TEMPERATURE (6)

1. Charts without automatic time control show 63 deg C for 30 minutes ()

2. Automatic systems must have induction type motors for milk pumps and timing devices ()

3. Agitation of milk in all vats during holding period ()

16c INLET AND OUTLET VALVES (3)

1. Leak protector inlet and outlet ()
2. Close-coupled outlet ()
3. Steaming of valves before discharging ()

16d VAT COVERS (2)

1. Designed to prevent drip into milk ()
2. Kept closed at all times ()

16e PREHEATING HOLDERS (1)

1. Holders other than heaters preheated to pasteurizing temperature immediately before using ()

17 COOLING (8)

- (a) Raw milk cooled to 10 deg C 1 hr before receipt ()
- (b) Pasteurized milk cooled to 10 deg C ()
- (c) Cooler covered or in a separate room ()
- (d) Cooler shields tight fitting and easily cleaned ()

18 BOTTLING (5)

- (a) Products bottled where pasteurized ()
- (b) Automatic bottling machine of simple design ()
- (c) Properly covered and easily cleaned ()
- (d) Adjustable float without removing cover ()
- (e) Overhead shields for infeeding conveyors ()

19 OVER FLOW MILK - TO BE DISCARDED (2)

20 CAPPING (2)

- (a) Imperfectly capped bottles dumped and repasteurized ()

21 PERSONNEL, HEALTH (3)

- (a) Examinations required ()
- (b) Cases and contacts kept from work until released ()

- (c) Rejected persons not employed ()
- (d) No expectorating on floor ()

22 PERSONNEL CLEANLINESS (3)

- (a) Washable clean outer garments ()
- (b) Clean hands
- (c) No smoking within processing rooms ()

23 VEHICLES (3)

- (a) Clean and tightly covered ()
- (b) No contaminating substances transported with milk ()
- (c) Distributors name etc shown on side of truck ()

TOTAL POINTS 100

C. INSTRUCTIONS:

The scoring at any inspection will be made in accordance with the following types of plants concerned..

1. Types of Pasteurizing Plants

- (a) Plants having complete and Modern Pasteurizing equipment.
- (b) Plants utilizing steam autoclaves for the pasteurizing of milk.

2.(a) The scoring standards shall apply in whole to the conditions itemized on the "Milk Plant Inspection Form" for those plants falling under the classification of 1(a) of Paragraph C.

(b) Plants utilizing steam autoclaves will be inspected for compliance to all sanitary and temperature items listed on the "Milk Plant Inspection Form".

D. The "Milk Plant Inspection Report" must be produced two (2) for each plant inspected, with one copy being supplied to the owner of the plant, and one copy retained officially by the Public Health Section of each prefecture for one year.

- E. The copy of the "Milk Plant Inspection Report" furnished the owner shall be tacked in a conspicuous place for inspection purposes.
- F. The inspection by the "Milk Plant Inspection Report" form shall be executed at least once a month.
- G. When the scored points are totaled 3 times consecutively and do not exceed half of the total 100 points possible, the authorities may prohibit the sale of milk from that plant until re-instated. Those plants listed under 1 (b) of Para. C are to be scored by using "APPROVED" or "DISAPPROVED" in LIEU OF POINT SYSTEM.
- H. Any dairy farm supplying or delivering milk to a collecting station or Milk Plant shall operate under the "Dairy Score Card System".
- I. A copy of the inspection results of the month shall be sent to the Director of the Public Health Bureau of the Ministry of Welfare before the 15th of the next month.